

In the Claims:

Claim 1 (amended). A process for producing a doped semiconductor substrate, which comprises the following steps:

providing a semiconductor substrate;

producing a doping at a surface of the semiconductor substrate;

after producing the doping, applying a layer selected from the group consisting of a polycrystalline layer and an amorphous layer to the surface; and

carrying out a heat treatment step for producing an epitaxial layer and a buried doping.